Fairfax Water

Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2023 TO 12/31/2023

Occoquan Reservoir - Griffith Water Treatment Plant Source Water

Date Report Generated: 1/10/2025

Parameter	Units[1]	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Limit[2]
Aggressive Index Number	Units	10	11	11	11	11	11	11	11	11	11	11	-	N/A
Alkalinity, Bicarbonate	mg/L	34	56	48	63	61	61	68	73	77	67	73	-	0
Alkalinity, Carbonate	mg/L	0	0	0	0	0	0	0	0	0	0	0	-	0
Alkalinity, Hydroxyl	mg/L	0	0	0	0	0	0	0	0	0	0	0	-	0
Alkalinity, Phenolphthalein	mg/L	0	0	0	0	0	0	0	0	0	0	0	-	0
Alkalinity, Total	mg/L	34	56	48	63	61	61	68	73	77	67	73	-	0
Bromate	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	5
Bromide	mg/L	0.01	0.02	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.01
Carbon Dioxide	mg/L	7	4	5	2	8	4	11	15	12	11	7	-	N/A
Chloride	mg/L	19.1	33.7	24.5	33.1	30.7	28.7	34.3	34.0	37.3	35.1	39.8	-	5.0
Color	Units	40	20	35	10	25	25	20	15	10	20	10	-	0
Dissolved Oxygen	mg/L	9.5	11.0	9.8	10.1	6.8	8.3	5.5	5.2	4.8	9.0	5.7	-	0.0
Fluoride	mg/L	BQL	0.2	BQL	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	-	0.2
Hardness, Calcium	mg/L	33	65	48	70	66	63	75	80	89	88	99	-	10
Hardness, Total	mg/L	48	91	70	97	93	86	100	107	114	115	130	-	10
Methylene Blue Activated Substances	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	0.20
N, Nitrate (Nitrate as N)	mg/L	0.66	1.46	0.86	0.90	0.68	0.56	0.85	0.85	0.87	1.76	2.12	-	0.20
N, Nitrite (Nitrite as N)	mg/L	BQL	BQL	BQL	BQL	0.03	0.01	0.03	0.03	0.03	0.09	0.09	-	0.01
pH	Units	7.0	7.5	7.3	7.8	7.2	7.5	7.1	7.0	7.1	7.1	7.3	-	N/A
Phosphate as Phosphorous	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	0.10
Orthophosphate as PO_4	mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	0.31
Solids, Total	mg/L	111	205	168	191	168	185	193	222	252	223	252	-	1
Solids, Total Dissolved	mg/L	100	170	154	174	166	168	202	220	234	222	260	-	1
Solids, Total Suspended	mg/L	5	4	5	3	2	2	3	3	3	2	4	-	1
Specific Conductivity	µmhos/cm	173	305	231	319	300	288	332	348	380	366	412	-	0
Sulfate	mg/L	13.5	30.8	19.7	32.2	30.4	27.3	36.8	36.8	42.2	44.9	55.1	-	5.0
Temperature	°C	6.4	7.4	9.6	14.4	15.6	19.7	22.5	23.3	24.6	19.7	15.1	-	N/A
Threshold Odor Number	Units	15	25	22	22	7	8	8	7	16	12	15	-	0
Total Organic Carbon	mg/L	6.0	3.7	5.3	3.4	4.9	5.8	5.1	4.8	4.5	5.3	4.6	-	0.5
Turbidity	NTU	22	5.1	13	2.4	3.2	2.2	3.6	3.0	2.3	1.9	4.5	-	0.05

BQL = The lowest quantitation limit of all analyses for the particular parameter: Below Quantitation Limit

[1]mg/L = milligrams per liter, µg/L = micrograms per liter, µmhos/cm = micromhos per centimeter, NTU = Nephelometric Turbidity Units

[2]Quant Limit = Quantitation Limit : lowest level of measurement, N/A = not applicable

- Not sampled

* Analysis pending

Fairfax Water

Water Quality Laboratory

Metal Analyses

Period of 01/01/2023 TO 12/31/2023

Occoquan Reservoir - Griffith Water Treatment Plant Source Water

Date Report Generated: 1/10/2025

Parameter	Units[1]	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Limit[2]
Aluminum	µg/L	1470	-	-	49.2	-	-	52.5	-	-	33.9	-	-	25.0
Antimony	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Arsenic	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Barium	µg/L	BQL	-	-	30.1	-	-	29.5	-	-	45.5	-	-	25.0
Beryllium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Cadmium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Calcium	mg/L	13.4	-	-	27.5	-	-	28.7	-	-	32.9	-	-	1.0
Chromium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Copper	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	25.0
Iron	µg/L	1220	289	820	122	147	67.0	122	107	80.3	76.3	281	-	25.0
Lead	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium	mg/L	4.1	-	-	7.3	-	-	7.0	-	-	7.1	-	-	1.0
Manganese	µg/L	145	107	92.2	67.3	72.9	114	141	163	191	125	321	-	25.0
Mercury	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	0.50
Nickel	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Potassium	mg/L	3.8	-	-	4.4	-	-	5.5	-	-	6.7	-	-	1.0
Selenium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon	mg/L	4.6	-	-	2.1	-	-	2.6	-	-	3.3	-	-	1.0
Silver	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium	mg/L	11.3	18.6	14.8	20.5	19.0	18.6	21.3	22.5	24.2	24.4	27.6	28.8	1.0
Thallium	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Zinc	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	25.0

BQL = The lowest quantitation limit of all analyses for the particular parameter: Below Quantitation Limit

[1]mg/L = milligrams per liter, µg/L = micrograms per liter

[2]Quant Limit = Quantitation Limit : lowest level of measurement

- Not sampled

* Analysis pending